

REMARKS/ARGUMENTS

Favorable reconsideration of this application is respectfully requested.

Claims 55-60 are pending in this application. Claim 54 is cancelled by the present response without prejudice and claims 58-60 are added by the present response. No new matter is believed to be added.

Claims 54 and 56 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent Application Publication No. 2002/0033501 to Sakagami in view of U.S. patent 6,376,877 to Wu et al. (herein "Wu"). Claim 55 was rejected under 35 U.S.C. § 103(a) as unpatentable over Sakagami and Wu as applied to claim 54, and further in view of U.S. patent 6,624,022 to Hurley et al. (herein "Hurley"). Claim 57 was objected to as dependent upon a rejected base claim, but was noted as allowable if rewritten in independent form to include all of the limitations of its base claim and any intervening claims.

Initially, applicants gratefully acknowledge the indication of the allowable subject matter in claim 57. With respect to that indication of allowable subject matter, new independent claim 59 is submitted. New independent claim 59 corresponds to previously pending depending claim 57 rewritten in independent form. Therefore, new independent claim 59, and claim 60 dependent therefrom, are believed to recite subject matter indicated as allowable in the outstanding Office Action.

Addressing now the rejection of claims 54 and 56 under 35 U.S.C. § 103(a) as unpatentable over Sakagami in view of Wu, and the further rejection of claim 55 further in view of Hurley, those rejections are traversed by the present response.

Independent claim 54 is canceled by the present response and claim 55 is now rewritten in independent form. Dependent claims 56 and 57, and new dependent claim 58, now depend from amended independent claim 55.

Amended independent claim 55 is believed to define over Sakagami in view of Wu and Hurley.

Independent claim 55 is amended by the present response to make a clarification by referring to upper surfaces of the first “shallow” trench isolation regions and upper surfaces of the second “shallow” trench isolation regions. New dependent claim 58 depends on claim 55 and is disclosed, for example, in the present specification at page 60, lines 4-8.

With respect to the above rejection, the outstanding Office Action relied upon Hurley to disclose the claimed feature that “heights, from a surface of the semiconductor substrate, of upper surfaces of the first shallow trench isolation regions are higher than heights, from the surface of the semiconductor substrate, of upper surfaces of the second shallow trench isolation regions”, as recited in independent claim 55.

With respect to the above-noted feature, the outstanding Office Action recognizes that Sakagami and Wu do not meet that claim feature, and the outstanding rejection cites Fig. 3 of Hurley to meet that claim feature. However, applicants respectfully submit the outstanding rejection is misconstruing the teachings in Hurley relative to the claim features.

Figures 1-15 of Hurley show a fabrication method of a flash memory that includes memory cell area 7 and peripheral area 9. Area 7 includes trench isolation regions 28 and area 9 also includes trench isolation regions 28, but which are at a greater depth. However, as shown in Figure 5 of Hurley the *upper surface* of the trench isolation regions 28 of the memory cell area 7 and the *upper surface* of the trench isolation regions 28 of the peripheral area 9 are *equal in height from the semiconductor substrate 12*. Claim 55 is not directed to such features. That is, claim 55 recites features directed to *heights of the upper surfaces* of trench isolation regions. In Hurley the different trench isolation regions 28 have different depths, but their upper surfaces are at the same height from a semiconductor substrate.

As shown for example in Figures 27A-27C in the present specification, heights from a surface of the semiconductor substrate to the upper surfaces of the first shallow trench isolation regions (filler 62 of Figure 27A) are higher than heights from the surface of the semiconductor substrate to upper surfaces of the second shallow trench isolation regions (filler 63 of Figure 27B or filler 64 of Figure 27C). Hurley does not disclose any similar structure.

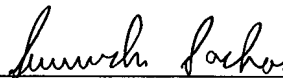
In such ways, the features recited in now independent claim 55, and the claims dependent therefrom, are believed to distinguish over the applied art to Hurley.

In view of these foregoing comments, applicants respectfully submit that each of the claims as currently written distinguishes over the applied art.

As no other issues are pending in this application, it is respectfully submitted that the present application is now in condition for allowance, and it is hereby respectfully requested that this case be passed to issue.

Respectfully submitted,

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